

DESCRIPTION OF A NEW GENUS FOR *OMMATOPTERYX*
VIRESCENS (HULST)
(LEPIDOPTERA: PYRAUSTIDAE, GLAPHYRIINAE)

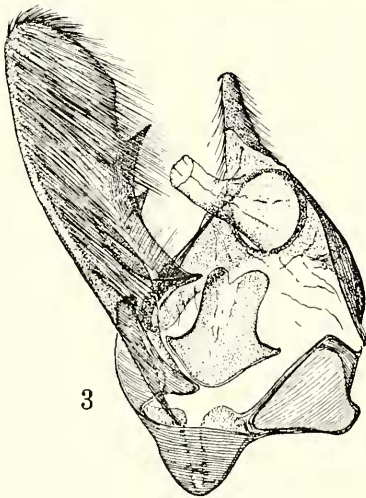
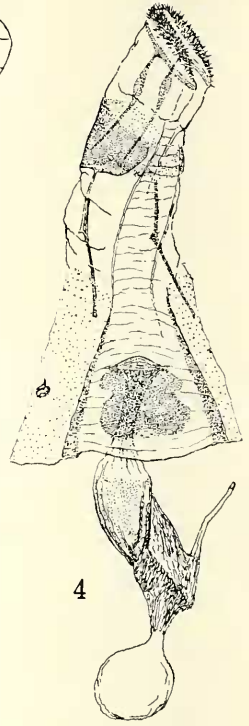
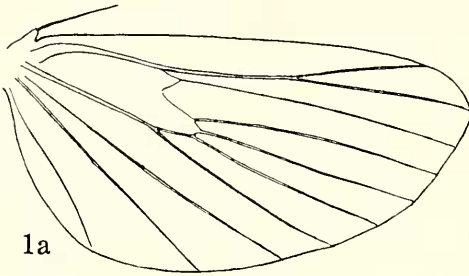
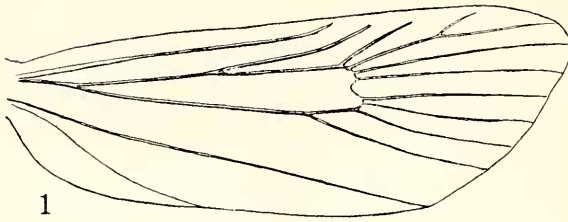
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The purpose of this paper is to provide a genus for the species *Ommatopteryx virescens* (Hulst), and to note its transfer from the Crambidae to the subfamily Glaphyriinae of the Pyraustidae.

When describing *Eromene virescens*, Hulst stated that it was not exactly congeneric with *Eromene*, the labial palpi being much shorter and the wing of a different shape. In addition to the differences Hulst noted, species of *Euchromius Guenée* (= *Eromene* Hübner and *Ommatopteryx* Kirby) differ from *virescens* as follows: Frons conical; the origin of vein 11 of the forewing is closer to the outer angle of the cell than to the middle of the cell and vein 1a terminates anterior to the inner margin; the origin of vein 2 of the hindwing is closer to the middle of the cell than to the lower angle; vein 4 is stalked with 5 and the cell open. In the male genitalia, the gnathos is much more strongly developed, extending well beyond the uncus and with a modified receptacle for the tip of the uncus, and the armature of the harpe is of a different type. In the female genitalia, the apophyses are nondilated; the anterior apophyses are very short, less than one-fourth as long as the posterior ones; the ductus bursae is much longer and the bursa copulatrix membranous, nonsclerotized and nonpigmented, except for the signum. The larval stage of the only species known, *E. ocellus* (Haw.), is subterranean in habitat and feeds on the roots of Gramineae.

The venation, genitalia, and larvae (in both structure and feeding habit) of *virescens* are very similar to those of species of the pyraustid genus *Dicymolomia* Zeller of the Glaphyriinae. The short, concealed third joint of the labial palpus of the adult of *virescens* and the fruit-feeding habit of its larvae are also aberrant for a crambid, but normal for a pyraustid. The character of the labial palpus, in combination with the larval fruit-feeding habit and similarity to *Dicymolomia*, as noted, indicates that *virescens* is definitely not a

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crambid and that its true affinity is with the pyraustids. Subfamily placement, however, is somewhat moot and is complicated by its having characters of both the Glaphyriinae and the Pyraustinae. Although the palpi and frons are those of a pyraustine, I believe, with the presence of fringe on the lower median vein on the upper surface of the hindwing and the similarity of venation, genitalia, and larval stage to species of *Dicymolomia*, the larvae of which also feed in the fruits of cactus, *virescens* is best placed in the Glaphyriinae.

Upiga, new genus

Figures 1-4

Type: Eromene virescens Hulst.

Frons smooth, oblique but not conically produced. Ocelli present. Antennae simple, slightly thicker in male than female. Labial palpus porrect or but slightly upturned; length two times width of head or slightly less; third joint short, concealed by scales. Maxillary palpus well developed, triangulate distally. Forewing (Fig. 1) with 12 veins, 8 and 9 stalked, remainder with origin from the cell and free. Vein 1a free and terminating on inner margin, near middle. Hindwing (Fig. 1a) with 8 veins; 2, 3, 4 and 5 with origin from the cell and free; 2 from near outer angle; 3 and 4 from outer angle; 5 approximate to 4; 6 from slightly below upper angle; 7 and 8 long stalked. Cell closed. Termination of vein 1a of the forewing and discocellular veins of the hindwing may require denuding or clearing for discernibility.

Genitalia: Male (Fig. 3, 3b) with uncus well developed, tubular, distal termination a short, sharp, down-curved spine. Gnathos moderately developed, arms narrow, straplike, sclerotization weaker distally. Anellus broad basally, median area membranous, strongly sclerotized laterally. Harpe broad, flaplike. Aedeagus (Fig. 3a) with cornuti. Female (Fig. 4) with anterior portion of bursae copulatrix sclerotized, termination of bursa copulatrix bulbous, membranous and nonpigmented. Posterior apophyses shorter than anterior apoph-

Figures 1-4. Upiga virescens (Hulst). 1, 1a. Venation of fore- and hindwing. 2. Adult, male. 3. Male genitalia with harpe and aedeagus removed, three-quarter ventral view. 3a. Aedeagus, lateral view. 3b. Inner surface of removed harpe. 4. Female genitalia, ventral view. Delineations of venation and genitalia prepared by Mr. A. D. Cushman, Scientific Illustrator, U.S. Department of Agriculture; not drawn to scale. Photograph of adult is twice natural size.

yses; posterior apophyses with conspicuous dilation between middle and the ovipositor.

Remarks: *Dicymolomia* differs from *Upiga* in venation, genitalia, frons, and labial palpus as follows: In *Dicymolomia*, the origin of vein 11 of the forewing is approximate to the outer angle of the cell and vein 1a terminates anterior to the inner margin; in the male genitalia, the lateral arms of the anellus are much narrower and there is no spurlike projection between the base and distal end of the sclerotized part of costa of the harpe; in the female genitalia, the dilation of the posterior apophyses is weaker and at or near the middle, and the bursa copulatrix is nonconstricted and nonbulbous below the ductus seminalis; the frons is round and the third joint of the labial palpus is unconcealed, and well developed.

***Upiga virescens* (Hulst), new combination**

Figures 1-4

Eromene virescens Hulst, 1900, J. N.Y. Ent. Soc., vol. 8, p. 225.

Ommatopteryx virescens (Hulst). Dyar, 1903, U.S. Nat. Mus.

Bull. no. 52, p. 410, no. 4619.—Barnes and McDunnough, 1917,

Check list Lepid. Boreal Am., p. 140, no. 5418.—McDunnough,

1939, Mem. So. Calif. Acad. Sci., vol. 2, no. 1, p. 24, no. 5953.

Adult (Fig. 2). Alar expanse 17-18 mm. Genitalia: male (Figs. 3, 3a, 3b); female Fig. 4).

Mature larva 15-17 mm. long; cylindrical, rather robust and conspicuously tapered posteriorly (ninth abdominal and anal segments greatly reduced in size). Head, prothoracic, and anal shield pale amber, without conspicuous markings. Body color sordid white; skin scobinate (scobination distinct in cleared specimens); body setae weak, pinacula small, concolorous with adjacent body area. Prolegs on abdominal segments 3 to 6 and on anal segment; the prolegs rather short, little, if any, longer than wide. Crochets on abdominal prolegs uniordinal, arrangement a complete ring or slightly interrupted outwardly; on anal legs, uniordinal and in a transverse band-like series.

Type: Male, in collection of U.S. National Museum. USNM Type No. 5186.

Type locality: Arizona.

Distribution: United States: Arizona. Mexico: Libertad, Sonora.

Food plant: *Lophocereus schottii* Engelm. (in fruits).

Remarks: The short, concealed, third joint of the labial palpus in combination with the conspicuous white frons and patagia, and the two rather broad, whitish, longitudinal lines on the forewing, one medial and the other along the inner margin, distinguish *virescens* from all other American *Lepidoptera*.

A difference in the crochets of the abdominal prolegs will distinguish the larvae of *virescens* from those of *Dicymolomia* species; they are uniordinal in the former and biordinal or irregularly triordinal in the latter.

Specimens of *virescens* are very rare in collections. Since *L. schottii*, in the United States, is restricted to a small area between Ajo, Arizona and the Mexican border, it appears likely *virescens* may be specific in respect to food plant.

I am indebted to members of the staff of the Division of Foreign Plant Quarantines at Nogales, Arizona, for rearing this species and supplying biological information.